Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 23. (Canceled)

24. (Previously presented) A method of inhibiting growth and reproduction of microorganisms in a cooling water system for a Fischer Tropsch facility, comprising the steps of:

a) providing cooling water;

b) performing a Fischer-Tropsch synthesis process to provide a product stream;

c) fractionally distilling the product stream and isolating liquid hydrocarbonaceous products and olefins;

d) subjecting the olefins to dehydrogenation to form alkynes;

e) adding an effective amount of the alkynes to the cooling water to resist visible growth for at least 10 days under ambient conditions when exposed to a certified inoculant; and

f) adding an effective amount of a neutralizing agent, wherein the neutralizing agent is a hydrogenation catalyst and H_2, to the cooling water to irreversibly deactivate the alkynes before or upon disposal of the cooling water, such that after the neutralizing agent is added, the cooling water supports visible growth of microorganisms in less than 10 days when exposed to a certified inoculum, growth media, and rapidly biodegradable substance under ambient conditions.

25. (Previously presented) A method according to claim 24, wherein the alkynes are added in an amount of at least 100 ppm.

26. (Original) A method according to claim 24, wherein the alkynes are primary alkynes and the neutralizing agent is a hydrogenation catalyst and H_2.

27. (Previously presented) A method according to claim 24, wherein the olefins are formed from a thermal cracking process which uses a heavy Fischer Tropsch feed derived from a Fischer Tropsch process.

28. (Original) A method according to claim 24, wherein the olefins are isolated from light Fischer Tropsch products.

29. (New) A method according to claim 24, wherein the alkynes are added in an amount of at least 1 ppm.

30. (New) A method according to claim 24, wherein the alkynes are added in an amount of at least 10 ppm.

31. (New) A method according to claim 24, further comprising a step (g) releasing the cooling water into a natural environment after the alkynes have been irreversibly deactivated.

32. (New) A method according to claim 24, further comprising a step (g) discharging the cooling water into a biological oxidation facility.

33. (New) A method according to claim 24, wherein after the neutralizing agent is added, the cooling water supports visible growth of microorganisms in less than 5 days when exposed to a certified inoculum, growth media, and rapidly biodegradable substance under ambient conditions.